Federal Response to Drought in California: An Analysis of S. 2198 and H.R. 3964

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Summary

California is experiencing serious water shortages due to widespread drought. Even though much of the state is served by two large water infrastructure projects that store water for future use—the federal Central Valley Project (CVP) and the State Water Project (SWP)—both projects have had to reduce water deliveries to the farmers and communities that they serve. Many water users have received no water from the CVP and SWP this year and are supplementing surface water supplies with groundwater. Some water basins are experiencing overdraft of local aquifers (i.e., extracting of more ground water than will be replenished over time). The dry hydrological conditions, in combination with regulatory restrictions on water being pumped from the Sacramento and San Joaquin Rivers Delta confluence with San Francisco Bay (Bay-Delta) to protect water quality and fish and wildlife, have resulted in historic water supply cutbacks for senior water rights users in some areas. The effects are widespread and are being felt by many economic sectors. The extent and severity of the drought is also taking its toll on fish and wildlife resources and has increased concern for wildfires. California also experienced severe water supply shortages during a three-year drought, which lasted from 2008 – 2010 and during a five-year drought from 1987 to 1992.

Several bills have been introduced in the 113th Congress to address California water supply and drought in particular. This report discusses the similarities and differences between two bills that have been passed by their respective chambers: H.R. 3964, which passed the House on February 5, 2014; and S. 2198, which passed the Senate on May 22, 2014.

H.R. 3964 and S. 2198 have few similarities in their specific approaches to addressing drought conditions in California; however, to different degrees, they both aim to provide more water for users that receive water from the CVP and SWP. The primary thematic similarity shared between the bills is to authorize or direct activities that would attempt to increase water supplies for users while, in some cases, decreasing or meeting the minimum water needs of the environment (e.g., fish and wildlife, and water quality). The duration of the authorization for these activities varies under each bill. In some cases, activities aimed to increase water supplies are authorized in times of a declared drought or decreased water supplies, and in other cases, these activities are authorized permanently without conditions.

The differences between the bills hinge on the approach the bills take towards allocating water supplies for users. S. 2198 would authorize the approval of projects and actions to maximize water supplies for users within existing laws and regulations; whereas H.R. 3964 would amend laws, and in some cases, pre-empt state and federal law to re-allocate water supplies and achieve its objectives.

A short-term issue for Congress is how to address the drought, and in particular, demands for more water from the CVP and SWP without jeopardizing the continued existence of several fish species, degrading water quality, or overriding state water rights allocations. A long-term issue for Congress is how to improve the supply and reliability of federal water deliveries and stabilize, and potentially restore, the aquatic ecosystems upon which water and power users and diverse economies depend upon. Efforts to address the long-term water and environmental needs of the state have been focused, in part, on the Bay Delta Conservation Plan (BDCP). However, the BDCP is controversial and if approved is expected to take years, if not decades, to implement. In the meantime, questions continue to be raised about annual Bay-Delta pumping levels and their adequacy in providing water supply to state and federal contractors and their effects on fish and wildlife, particularly on threatened and endangered species.

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Introduction

Since 2008, California has experienced more dry years than it has wet years. Drought conditions in California are currently "exceptional" and "extreme" in much of the state, including in prime agricultural areas of the Central Valley, according to the U.S. Drought Monitor (see **Figure 1**).[1] Such conditions pose significant challenges to water managers who before this dry winter were already grappling with below-normal surface water storage in the state's largest reservoirs. Groundwater levels in many areas of the state also have declined due to increased pumping over the last three dry years. While rains in March improved the water year outlook somewhat—moving the year from the driest on record in terms of precipitation to date to the third-driest—water managers are concerned about how long this drought will last and its long-term impacts. Further, the short-term effects of the drought are also a concern. A relatively dry winter with little existing snowpack raises the question over whether water supplies will be refreshed later in the year.

The extent of the drought in California has generated varied and widespread effects. Most of the San Joaquin Valley is in exceptional drought—the most intense level of drought reported by the Drought Monitor—and federal and state water supply allotments are at historic lows. Many farmers are fallowing lands and some are removing permanent tree crops. Cities and towns have also been affected, and the Governor of California has requested voluntary water use cutbacks of 20%.[2] The drought has also affected fish and wildlife species and the recreational and commercial activities they support. Current drought conditions in California and much of the West have fueled congressional interest in drought and its effects on water supplies, agriculture, and ecosystems.[3] Several bills have been introduced in the 113th Congress to address different aspects of drought in California and other regions.[4] Of these bills, S. 2198 (Emergency Drought Relief Act of 2014) has passed the Senate,[5] and H.R. 3964 (Sacramento-San Joaquin Valley Emergency Water Delivery Act) has passed the House.[6] This report summarizes these two bills, discusses similarities and differences between the bills, and analyzes how these bills could address issues and questions associated with the drought in California.

Central to addressing the drought from a federal and state perspective is the coordinated operation of the federal Central Valley Project (CVP) and the State Water Project (SWP). Both projects collect and store water in reservoirs in northern California. They also divert water from the San Joaquin and Sacramento rivers delta confluence with San Francisco Bay (Bay-Delta) and pump water south to water users in central and southern California. While the CVP serves mostly agricultural water contractors, the SWP serves largely urban or municipal and industrial contractors; however, both projects serve some contractors of both varieties. The operation of this system has been of interest Congress since there is a federal nexus with respect to the CVP.

[1] See http://droughtmonitor.unl.edu/Home/StateDroughtMonitor.aspx?CA.

[2] See http://gov.ca.gov/news.php?id=18368.

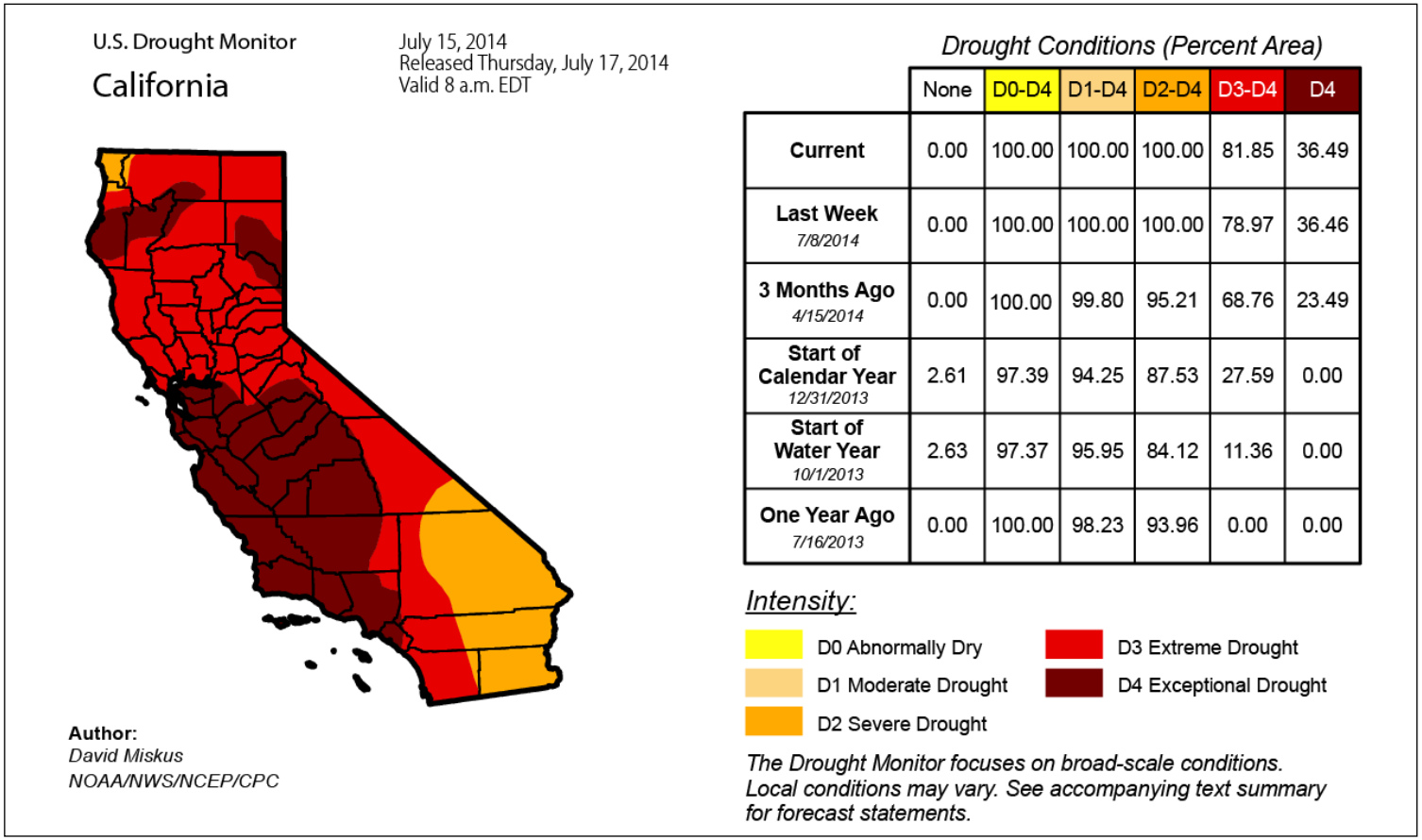
[3] For information on drought in general, see CRS Report R43407, *Drought in the United States: Causes and Current Understanding*, by Peter Folger and Betsy A. Cody.

[4] Other selected bills that address drought or water management in California include H.R. 3964, which passed the House on February 5, 2014; H.R. 1927; H.R. 4039; H.R. 4239; H.R. 4300; and some bills that address water storage specifically (e.g., H.R. 4126 and H.R. 4127).

[5] S. 2198 passed the Senate on May 22, 2014, and is being held at the desk.

[6] H.R. 3964 passed the House on February 2, 2014.

Figure 1. Drought in California, 2014



Source: United States Drought Monitor: http://droughtmonitor.unl.edu/Home/StateDroughtMonitor.aspx?CA.

Congress and the Administration have been involved in addressing CVP operations through manuals and procedures laid out by existing federal laws such as the Endangered Species Act (ESA, P.L. 93-205, 16 U.S.C. §§1531-1543) and the Central Valley Project Improvement Act (CVPIA, Title 34 of P.L. 102-575).

Summary of H.R. 3964 and S. 2198

H.R. 3964

H.R. 3964 was introduced on January 29, 2014, and entitled the Sacramento-San Joaquin Valley Emergency Water Delivery Act. It passed the House on February 5, 2014. H.R. 3964 is similar to H.R. 1837 (introduced in the 112th Congress) with some notable additions.[7] Below is a summary of each title in H.R. 3964. Each title addresses a different aspect of California water policy.

- **Title I. Central Valley Project Water Reliability.** Overall, Title I would make numerous changes to Central Valley Project (CVP) management and operations, primarily by amending the Central Valley Project Improvement Act (CVPIA).[8] Specifically, it would amend CVPIA to broaden the purposes for which water previously dedicated to fish and wildlife can be used; add to the purposes a provision "to ensure" water dedicated to fish and wildlife purposes is replaced and provided to CVP contactors by the end of 2018 at the lowest "reasonably achievable" cost; change the definitions of fish covered by the act; broaden the purposes for which the Central Valley Project Restoration Fund (CVPRF) monies can be used; reduce revenues into the CVPRF; mandate operation of CVP and SWP according to a1994 interim agreement, the Bay-Delta Accord;[9] and mandate development and implementation of a plan to increase CVP water yield by October 1, 2018.
- **Title II. San Joaquin River Restoration.** Title II would direct the Secretary of the Interior to cease implementation of the San Joaquin River Restoration Settlement Agreement, which was agreed to in 2006 and was authorized under the San Joaquin River Restoration Settlement Act (SJRRS) in 2010.[10] It would declare that this legislation satisfies all obligations of the Secretary and others to keep in good condition any fish below Friant Dam, including obligations under the California Fish and Game Code, the state public trust doctrine, and the federal ESA. It would also remove the salmon restoration requirement in the SJRRS that was authorized in P.L. 111-11.

[7] Sections 101 – 111 are nearly identical to H.R. 1837. New sections include Section 112 and Section 113 specifying certain Warren Act Contracts; Section 114, Pilot Program to Protect Native Anadromous Fish in the Stanislaus River; and, Section 115, San Luis Reservoir Rescheduled Water Operations. For a better understanding of H.R. 1837, see CRS Report R42375, *H.R. 1837—The Sacramento-San Joaquin Valley Water Reliability Act*, by Betsy A. Cody

[8] Central Valley Project Improvement Act (P.L. 102-575).

[9] Principles for Agreement on Bay-Delta Standards Between the State of California and the Federal Government, Washington, DC, December 15, 1994, see http://www.calwater.ca.gov/content/Documents/library/SFBayDeltaAgreement.pdf. The Bay-Delta Accord was a three-year interim agreement intended to coordinate and clarify how various environmental laws and regulations would affect pumping of water from the federal CVP and SWP. Water quality and flow protections or restrictions in the accord are very similar to those contained in the state's current Water Quality Control Plan for the Delta (also known as D-1641); however, it is not clear to what extent they overlap.

[10] San Joaquin River Restoration Settlement Act (Title X of P.L. 111-11).

- **Title III. Repayment Contracts and Acceleration of Repayment of Construction Costs.** This title would direct the Secretary of the Interior, upon request from water contractors, to convert utility-type water service contracts to repayment contracts, and then allow accelerated repayment of those outstanding repayment obligations. Irrigation repayment obligations (net construction cost) for the CVP for 2012, the last year for which such data are readily available, total approximately $1.18 billion; municipal & industrial (M&I) repayment obligations for 2012, the last year for which such data are readily available, total approximately $121 million.[11]
- **Title IV. Bay-Delta Watershed Water Rights Preservation and Protection.** Title IV would provide assurances of water rights protections for those with water rights senior to the CVP, including Sacramento River Valley Settlement Contractors. It would also direct a new shortage policy for certain north-of-Delta CVP water service contracts, which would aim to limit maximum reductions to these supplies.[12]
- **Title V. Miscellaneous.** Title V declares that the unique circumstances of coordinated operations of the CVP and SWP "require assertion of Federal supremacy to protect existing water rights throughout the system" and that as such shall not set precedent in any other state. Title V also declares that nothing in the act shall "affect in any way" the State of California Proclamation of State Emergency and associated executive order issued by the governor on January 14, 2014. It would also adjust a Wild and Scenic River boundary, potentially allowing for increased storage at Exchequer Dam.

S. 2198

S. 2198, the Emergency Drought Relief Act of 2014, was introduced on April 1, 2014, and passed the Senate on May 23, 2014.[13] S. 2198 contains eight sections and is largely (but not entirely) focused on addressing water supply and drought issues in California. The following points summarize the sections in the bill:

- **Section 1 and 2** are the Table of Contents and Findings of the bill, respectively. The Findings state that the 2013-2014 drought in California fully satisfies the conditions needed for exercising emergency decision-making, analytical, and public-review requirements under four laws: (1) The Endangered Species Act, (2) The National Environmental Policy Act of 1969, (3) water control management

[11] U.S. Bureau of Reclamation, Dept. of the Interior, Central Valley Project Schedule of M&I Capital Costs to be Repaid by Component and/or Facility as of September 30, 2012 (2014 M&I Water Rates), Mid-Pacific Region, CVP ratebooks, Sacramento, CA, Oct. 30, 2013, p. 2, http://www.usbr.gov/mp/cvpwaterrates/ratebooks/mi/2014/2014_mi_sch_a-4.pdf; and Central Valley Project Schedule of Irrigation Capital Costs to be Repaid by Component and/or Facility as of September 30, 2012 (2012 Irrigation Water Rates), Mid-Pacific Region, CVP ratebooks, Sacramento, CA, Nov. 5, 2013, p. 3, http://www.usbr.gov/mp/cvpwaterrates/ratebooks/irrigation/2014/2014_irr_sch_a-4.pdf.

[12] Like many other western states, California uses a system of prior appropriation as part of its hybrid water rights system. Under a prior appropriation system, water rights permits are issued on a first-come, first-served basis (also known as first-in-time, first-in-right), resulting in senior and junior water rights based on priority under the system. For more information on California water law, see CRS Report RL34554, *California Water Law and Related Legal Authority Affecting the Sacramento-San Joaquin Delta*, by Cynthia Brougher.

[13] S. 2016, which was introduced on February 11, 2014, contains similar goals and language to S. 2198.

procedures of the Corps of Engineers (Corps) under 33 U.S.C. §222.5, and (4) the Reclamation States Emergency Drought Relief Act of 1991 (P.L. 102-250).

- **Section 3** includes definitions of terms used in the bill. For example, the term Secretaries is to include the Secretaries of Agriculture, Commerce, and the Interior, and the Administrator of the Environmental Protection Agency.[14]
- **Section 4(a)** would direct the Secretaries to provide the maximum quantity of water supplies possible to CVP and Klamath Project agricultural, municipal and industrial (M&I), and refuge service and repayment contractors; SWP contractors; and any other locality or municipality in the state of California. This would be done by approving, consistent with applicable laws and regulations, projects and operations to provide additional water supplies as quickly as possible, and based on available information, to address emergency conditions.[15]
- **Section 4(c)** of S. 2198 contains 13 subsections that would direct the Secretaries to implement several specific project-related and operational actions largely in California for carrying out Section 4(a). As with Section 4(a), Section 4(c) states that all actions are to be accomplished consistent with applicable laws and regulations. A summary of the 13 subsections under Section 4(c) is below:[16]
  - Section 4(c)(1) would direct the Secretaries to ensure that the Delta Cross Channel Gates (Delta Gates) remain open to the greatest possible extent and timed to maximize peak tide flood periods and to provide water supply and water quality benefits. This action would be authorized for the duration of the drought emergency-declaration by the state. According to the section, this operation is to be consistent with the State Water Resources Control Board (SWRCB) order for a Temporary Urgency Change (TUC) in terms, in response to drought, effective January 31, 2014, as modified by subsequent orders.[17]
  - Section 4(c)(2)(A) would direct the Secretaries to collect data associated with the operations of the Delta Gates and the effect of operations on threatened and endangered species listed under the Endangered Species Act (ESA), water quality, and water supply. Section 4(c)(2)(B) would direct an assessment of the data collected, and require the Director of the National Marine Fisheries Service (NMFS) to make recommendations for changing the operations of the CVP and SWP, including, if appropriate, changes to reasonable and prudent alternatives in the BiOps issued by NMFS on June 4,

[14] The Secretary of the Army (associated with the Corps) is not included even though drought procedures related to the Corps are referred to in the findings.

[15] Section 4(b) of the bill would not allow federal agencies to approve projects under Section 4 that would otherwise require congressional authorization outside of this bill. Further, this bill would not authorize projects that did not follow procedures required by applicable law.

[16] Several of these specified actions are focused on increasing water supplies (or minimizing reductions to water supplies); however, their effectiveness in achieving their objectives could be tempered by the condition that they are to be implemented consistent with applicable laws and regulations. Further, the actions specified in this section are only in effect until the governor of the state suspends the state of drought emergency declaration.

[17] For information on the TUCs, see Thomas Howard, *Order Approving a Temporary Urgency Change in License and Permit Terms and Conditions Requiring Compliance with Delta Water Quality Objectives in Response to Drought Conditions (With Modifications Dated February 7, 2014, February 28, 2014)*, State Water Resources Control Board, Order, February 28, 2014. Available at http://www.waterboards.ca.gov/waterrights/water_issues/programs/drought/docs/022814_revised_tucp_order.pdf. The order has subsequently been modified several times.

2009. The provision states that the changes should be likely to produce fishery, water quality, and water supply benefits.

- Section 4(c)(3)(A) would direct the Secretaries to implement turbidity control strategies that would allow for increased water deliveries while avoiding jeopardy to adult delta smelt at the SWP and CVP pumps. This would be done according to the FWS Delta smelt BiOp. Section 4(c)(3)(B) would direct the Secretaries to manage reverse flow in the Old and Middle Rivers (OMR) according to the FWS Delta smelt Biological Opinion (BiOp) dated December 15, 2008,[18] and the NMFS BiOp for salmonids, dated June 4, 2009, to minimize water supply reductions for the CVP and SWP.
- Section 4(c)(4) would direct the Secretaries to adopt a 1:1 inflow to export ratio (I:E ratio) for increased San Joaquin River flows resulting from water transfers and exchanges, among other purposes. The flow would be measured at Vernalis on a three-day rolling average from April 1 through May 31each year, as long as the governor's drought emergency declaration is in effect.
- Section 4(c)(5) would direct the Secretaries to issue all necessary permit decisions under their authority for temporary barriers or operable gates in Delta channels to improve water quantity and quality for SWP and CVP South-of-Delta water contractors and other water users within 30 days of receiving a permit application from the state. According to this section, barriers or gates "should" provide species benefits and protection and in-Delta water quality and "shall" be designed so that formal Section 7 consultation under ESA would not be necessary.
- Section 4(c)(6)(A) would direct the head of the FWS and the Commissioner of the Bureau of Reclamation (Reclamation) to complete all necessary National Environmental Policy Act (NEPA) and ESA requirements, within 30 days of receiving a request for a permit, for final permit decisions on water transfers associated with voluntary fallowing of nonpermanent crops in the state of California. Section 4(c)(6)(B) would direct the head of FWS to allow "any water transfer request associated with fallowing" to maximize water supplies for non-habitat use, as long as the action would comply with federal law and regulations.
- Section 4(c)(7) would direct the Secretaries "under the existing authority of the Secretary of the Interior," to participate in, provide grants to, or provide funding for, pilot projects to increase water in reservoirs in regional river basins that are experiencing "extreme, exceptional, or sustained drought." These basins would have to directly affect the water supply of California and includes the Colorado River basin. Further, the Secretary (presumably the Secretary of the Interior), is to work with the "respective State" in regards to providing grants, participation, or funding to or for activities in the Upper Division of the Colorado River. (It is unclear if State refers to a state other than California.)

[18] The 2008 FWS BiOp also has not been fully implemented; however, a March 13 9th Circuit Court decision upheld the 2008 BiOp, so measures covered by the BiOp would go into effect even without S. 2198, but are not currently in place. (Delta Smelt Consolidated Cases, No. 11-17143, 2014 WL 975130 (9th Cir. March 13, 2014).)

- Section 4(c)(8) would direct the Secretaries to maintain all rescheduled water supplies in San Luis Reservoir and Millerton Reservoir for the following year, unless unable to do so due to storage capacity limitations.[19]
- Section 4(c)(9) would direct the Secretaries to "the maximum extent possible ... without causing land subsidence or violating water quality standards" meet contract water supply needs of CVP refuges through the use of water conservation measures, water conveyance facilities, and wells for groundwater resources. To accomplish these activities, the Secretaries would use funding available under the Water Assistance Program or WaterSMART Program of DOI. Further, Section 4(c)(9)(B) would redirect a quantity of water obtained from measures in subparagraph (A) from refuges to CVP contractors.
- Section 4(c)(10) would authorize the Secretaries to coordinate with the Secretary of Agriculture to create an agreement with the National Academy of Sciences to conduct a study on the effectiveness and environmental impacts of salt cedar biocontrol activities and their effect on increasing water supplies and improving habitat on the Colorado River in California and elsewhere.
- Section 4(c)(11) would direct that any WaterSMART grant funding allocated to California be made available on a "priority and expedited basis": (1) for emergency drinking and municipal supplies to meet minimum public health and safety needs; (2) to prevent loss of permanent crops; (3) minimize economic losses from drought; and (4) to provide conservation tools and technology with immediate water supply benefits.[20]
- Section 4(c)(12) would direct the Secretaries to implement "offsite upstream projects" in the Delta and upstream Sacramento River and San Joaquin River basins in coordination with California Department of Water Resources and Department of Fish and Wildlife. Projects are to offset the effects of actions taken under this act on ESA listed species.
- Section 4(c)(13) would direct the Secretaries to use "all available scientific tools" to identify and implement any changes to the real-time operations of any Reclamation, state, and local water projects that could result in additional water supplies.

- **Section 4(d)** states that the provisions of Section 4 shall apply to all federal agencies that have a role in approving projects in Sections 4(a) and 4(c) of this bill. Thus, although not specifically mentioned, if the Corps of Engineers or another agency has a permitting or approval role in one of the projects that could be implemented under Section 4, the provisions of Section 4 would also apply to that agency.
- **Section 4(e)** would direct federal agencies, upon request of the state of California, to use "expedited procedures under this subsection" to make final decisions related to federal projects or operations that would provide additional water or address emergency drought conditions under Sections 4(a) and 4(c).

[19] Rescheduling is currently done under agency guidelines, not as a matter of law. Under agency guidelines, rescheduled water is spilled when San Luis Reservoir and Millerton Lake refill.

[20] Typically, WaterSMART grants are used for a host of conservation and efficiency projects with long-term benefits; it was not designed as an emergency drought program.

Pursuant to Section 4(e)(2), after receiving a request from the state, the head of an agency referred to in Section 4(a), or the head of another federal agency responsible for reviewing a project, the Secretary of the Interior would be required to convene a "final project decision meeting" with the heads of all relevant federal agencies "to decide whether to approve a project to provide emergency water supplies." After receiving a request for resolution, the Secretary would be required to notify the heads of all relevant agencies of the request for resolution, the project to be reviewed, and the date of the meeting. The meeting must be convened within seven days of the request for resolution. Not later than 10 days after that meeting, Section 4(e)(4) would require the head of the relevant federal agency to issue a final decision on the project. The Secretary of the Interior is authorized to convene a final project decision meeting at any time, regardless of whether a request for resolution is requested under 4(e)(2).

- **Section 5** would direct agencies responsible for "carrying out this act" to consult with the Council on Environmental Quality (CEQ)[21] to develop "alternative arrangements" to comply with NEPA in accordance with existing regulations "during the emergency."
- **Section 6** addresses California's use of monies in its State Revolving Fund (SRF) programs that assist wastewater and drinking water infrastructure projects, pursuant to the federal Clean Water Act (CWA) and the federal Safe Drinking Water Act (SDWA), respectively. The section would direct the Administrator of the EPA, when allocating SRF funds, to require that the state of California review and give priority to projects that will "provide additional water supplies most expeditiously to areas that are at risk of having inadequate supply of water for public health and safety purposes or to improve resilience to droughts." Further, the Director is to require the state to review and prioritize funding for such projects, direct the EPA Administrator to expedite review of Buy American waiver requests, if such requests are submitted, and authorize 40-year loan repayments to the SRFs.[22] The bill would provide that nothing in Section 6 authorizes EPA to modify existing state-by-state funding allocations, funding criteria, or other requirements related to the CWA and SDWA SRF programs for the state of California.
- **Section 7** states that if the bill were to be enacted, it would not preempt any California state law in effect on the date of such enactment, including area-of-origin, or other water rights protections.
- **Section 8** states that authorities under Section 4(a); Section 4(c), subsections (1) through (6), (8) and (9), and (11) through (13); Section 5; and Section 6 would permanently expire when the governor of the state suspends the drought emergency declaration.

[21] This is to be done in accordance with 40 C.F.R. §1506.11, including successor regulations.

[22] Under both of the SRF programs, loans are normally to be repaid to a state within 20 years, but terms may be extended to 30 years in cases such as economically disadvantaged communities.

Comparison of H.R. 3964 and S. 2198

H.R. 3964 and S. 2198 share the objective of increasing water supplies for agricultural and urban users. The bills, however, largely differ in their approach to achieve this objective. This section summarizes and provides analysis of selected similarities and differences between the bills.

H.R. 3964 and S. 2198 have few similarities in their specific approaches to addressing drought conditions in California; however, to different degrees, they both aim to provide more water for users that receive water from the CVP and SWP. The primary thematic similarity among the bills is to authorize or direct activities to increase water supplies for users, while, in some cases, decreasing or meeting the minimum water needs of the environment (e.g., fish and wildlife, and water quality). The duration of these changes varies. In some cases, they would be authorized only in times of a declared drought or decreased water supplies, and in other cases, these activities would be authorized permanently under all conditions.

H.R. 3964 primarily aims to increase water deliveries to California's CVP contractors, particularly those south of the Delta, who have seen reductions in deliveries since passage of the CVPIA in 1992. The bill would potentially ease some restrictions on CVP and SWP water operations and would allow more water to be available for users resulting from those changes. The bill would likely result in greater water deliveries by preempting some federal and state laws, including fish and wildlife protections and other CVP operational mandates tied to the coordinated operations of the CVP and SWP. It is unclear what impacts such changes would have on other water users in the state. H.R. 3964 would establish the 1994 Bay Delta Accord (Accord) as a basis for operation of the CVP and SWP pumps in the Delta, rather than current (and evolving) in-Delta water quality standards and proscriptions included in federal biological opinions (BiOps). These standards and restrictions impose water flow restrictions that appear to be a contributing factor to reduced pumping and water availability in the Delta.

S. 2198 would direct the Secretaries of selected federal agencies to provide the maximum quantity of water supplies possible to CVP and other water users in the state of California by approving, consistent with applicable laws and regulations, projects and operations to provide additional water supplies as quickly as possible.[23] Although activities are to be consistent with laws and regulations, presumably including those regarding the environment, S. 2198 provides direction to federal agencies to maximize water supplies within such constraints. This juxtaposition makes it difficult to understand the potential effect of the proposed legislation. It would appear to fall to the implementing agency to decide what actions are both in compliance with S. 2198 directives to increase storage while remaining consistent with law and regulations. It is not clear for example how or when agencies would determine the effects of providing "maximum water supplies" on species viability and water quality. Such effects may not be apparent, quantifiable, or known for several years into the future. Conversely, agencies and water users may not agree that an agency's actions adequately implement the legislations direction to provide "maximum water quantities." While some observers believe that agencies should not maximize water supplies to the detriment of species in the long term,[24] others are advocating

[23] Section 4(a) – (c).

[24] This view is exemplified at an opinion piece by Harrison "Hap" Dunning and Steve Machtinger, "Feinstein Water Legislation will Weaken Delta Conservation Efforts," *San Jose Mercury News*, May 30, 2014, pp. http://www.mercurynews.com/opinion/ci_25867361/feinstein-water-legislation-will-weaken-delta-conservation-efforts#disqus_thread.

relaxation of some laws and regulations, or meeting minimum standards of environmental laws while maximizing water supplies.[25]

Selected Similarities Between H.R. 3964 and S. 2198

While the two bills take significantly different approaches to increasing the reliability of water supply during dry years, some similar issue areas and provisions in the bills lend themselves to comparison. A summary of some selected provisions are provided below:

- H.R. 3964 and S. 2198 would provide authority to expedite water transfers with different conditions. H.R. 3964 would direct the Secretary to facilitate and expedite water transfers and prohibit environmental or mitigation requirements as a condition to transfers.[26] S. 2198 would not waive environmental requirements for water transfers, but instead would set a limit on the number of days for making a final permit decision. Specifically, S. 2198 would direct the head of the FWS and the Commissioner of Reclamation to complete all necessary NEPA and ESA requirements, within 30 days of receiving a request for a permit, for final permit decisions on water transfers associated with voluntary fallowing of nonpermanent crops in the state of California.[27] The bill would also direct the head of FWS to allow "any water transfer request associated with fallowing" to maximize water supplies for non-habitat use, as long as the action would comply with federal law and regulations.[28]
- Both bills address NEPA so as to address the objective of streamlining the permit process or in some cases bypassing the federal permit process, although they do so in different ways. For example, H.R. 3964 states that compliance with the California Environmental Quality Act shall suffice for compliance with NEPA for filing of a Notice of Determination or a Notice of Exemption for any project related to the CVP or delivery of water from the CVP.[29] Further, H.R. 3964 would not require Reclamation to cease or modify federal actions or activities related to any project of the CVP or water delivery from the CVP due to the pending completion of any judicial review of a determination made under NEPA.[30] S. 2198 would direct agencies responsible for "carrying out this act" to consult with the Council on Environmental Quality (CEQ)[31] to develop "alternative arrangements" to comply with NEPA in accordance with existing regulations "during the emergency."[32] In addition, as noted above S. 2198 would require final permit decisions to be made within 30 days under the NEPA process.[33]

[25] Some actions being undertaken to increase water supplies for users are being done while meeting minimal protections for fish and wildlife under ESA. For example, see section 8.3 under the Temporary Urgency Change Petition Order at http://www.waterboards.ca.gov/waterrights/water_issues/programs/drought/docs/tucp/050214_tucp_order.pdf.

[26] Section 104(1).

[27] Section 4(c)(6)(A) of S. 2198.

[28] Section 4(c)(6)(B) of S. 2198.

[29] Section 111(a) of H.R. 3964.

[30] Section 111(b) of H.R. 3964.

[31] This is to be done in accordance with 40 C.F.R. §1506.11, including successor regulations.

[32] Section 5 of S. 2198.

[33] Section 4(c)(6)(A) of S. 2198.

- Both bills would direct rescheduled water supplies in the San Luis Reservoir to be held for use in the following year by water users. Specifically, H.R. 3964 would direct the Secretary of the Interior to allow certain south-of-Delta water service or repayment contractors to reschedule unused CVP water for storage and subsequent use in the following year. The bill includes timelines and conditions, including that such rescheduling shall not interfere with CVP operations in the contract year into which the water has been rescheduled.[34] Similarly, S. 2198 would require the Secretary of the Interior to hold all rescheduled water supplies in San Luis Reservoir and Millerton Reservoir for the following year, unless unable to do so due to storage capacity limitations.[35] These directions appears to be consistent with the approach of Reclamation in recent years in making available rescheduled water, subject to available storage and that year's CVP operations.
- Both bills aim to increase water supplies in reservoirs either by authorizing potential increases in water storage capacity or by authorizing the implementation of projects that would increase water in existing reservoirs. For example, H.R. 3964 would authorize the Secretary to partner with local joint power authorities and others in pursuing storage projects (e.g., Sites Reservoir, Upper San Joaquin Storage, Shasta Dam and Los Vaqueros Dam raises) authorized for study under CALFED (P.L. 108-361), but would prohibit federal funds to be used for this purpose or for financing and constructing the projects. S. 2198 would direct federal agencies to participate in, provide grants to, or provide funding for pilot projects to increase water in reservoirs in regional river basins that are experiencing "extreme, exceptional, or sustained drought."[36]
- Both bills appear to acknowledge and incorporate some state actions into their directives. H.R. 3964 states that nothing in the act shall "affect in any way" the Proclamation of State Emergency and associated Executive Order (Emergency Order) issued by Governor Brown on January 17, 2014,[37] or the authorities granted by the Proclamation. Further, H.R. 3964 would not limit the authority provided by the Proclamation to allow the SWRCB to modify standards or operational constraints adopted to implement the Bay-Delta Accord so as to make additional water supplies available to service areas during a state of emergency.[38] S. 2198 would authorize actions to ensure that the Delta Gates remain open to the maximum extent possible, consistent with the operational and monitoring criteria specified in the SWRCB Temporary Urgency Change Petition Order.[39] Further, S. 2198 states that it will not preempt any state laws, including area of origin and other water rights protections.[40]

[34] Section 115 of H.R. 3964.

[35] Section 4(c)(8) of S. 2198.

[36] Section 7 of S. 2198.

[37] The Proclamation of State of Emergency and associated Executive Order can be found at http://gov.ca.gov/news.php?id=18368.

[38] Section 502 of H.R. 3964.

[39] Section 4(c)(2) of S. 2198.

[40] Section 7 of S. 2198.

Selected Differences Between H.R. 3964 and S. 2198

There are considerably more differences than similarities between H.R. 3964 and S. 2198. The differences hinge on the fundamental approach the bills take towards providing and allocating water supplies for users. S. 2198 generally provides authority to approve projects and actions to maximize water supplies for users within existing laws and regulations; whereas H.R. 3964 would amend existing laws that in some cases would preempt state and federal law to re-allocate water supplies and achieve its objectives. Some examples of the most prominent provisions that would amend federal law to address water conveyance and supplies for users under H.R. 3964 include the following:

- Title I of H.R. 3964 addresses many provisions of the CVPIA, including provisions that would potentially decrease the amount of project water for fish and wildlife purposes, alter enhancement and mitigation activities, reduce water transfer limitations, repeal tiered pricing formulas, and change other restoration and mitigation provisions. For example, H.R. 3964 would direct the Secretary of the Interior to facilitate and expedite water transfers and prohibit environmental or mitigation requirements as a condition to transfers.[41]
- Section 108 of H.R. 3964 would prohibit "any" state or federal law (including the public trust doctrine and possibly certain California water rights laws) from reducing water supplies beyond those allowed in the Bay-Delta Accord and declaring a federal supremacy over water management to "protect existing water rights throughout the system." This approach would create standards for delivering water supplies that would not be limited by other laws that could diminish these supplies (e.g., environmental laws such as ESA and state water quality regulations).
- Title II of H.R. 3964 would repeal much of the authority to implement the San Joaquin River Restoration Settlement (SJRRS) under P.L. 111-11. For example, Section 201 of H.R. 3964 directs the Secretary of the Interior to "cease any action" to implement the stipulated Settlement Agreement on San Joaquin River Restoration. The bill would also amend the San Joaquin River Restoration Settlement Act's purpose to be restoration of the San Joaquin River, instead of implementation of the Settlement Agreement.[42] Further, it would remove several provisions from P.L. 111-11 that would authorize physical restoration of the San Joaquin River such as channel and structural improvements.[43] The section would also modify Friant Dam operations to address Restoration Flows.

Significantly, the bills would also differ in the duration of some of the provisions that would be authorized. H.R. 3964's changes to laws and operations would persist after the drought declaration is lifted; whereas S. 2198 has termination clauses for several selected provisions that would end when the current drought declaration has been lifted.[44]

Both bills contain provisions that address certain issues that are not covered in the other Chamber's bill. For example, H.R. 3964 would make extensive changes to implementation of federal reclamation law under CVPIA, the contracting provisions under the 1939 Reclamation Project Act, restoration efforts under the San Joaquin River Restoration Settlement Act, and state

[41] Section 104(1) of H.R. 3964.

[42] Section 202 of H.R. 3964.

[43] Section 204(1)(B) of H.R. 3964.

[44] Section 8 of S. 2198.

and federal relationships under Section 8 of the Reclamation Act of 1902. The bill would also alter the way the state of California implements its own state laws with regard to operation of the CVP and SWP and non-native fisheries. S. 2198 does not address these issues directly, and would instead focus efforts on several mandated actions that are not directly addressed in H.R. 3964. These actions would affect water conveyance and supplies in the Delta and include, altering the operations of the Delta gates, adopting a 1:1 inflow to export for increased San Joaquin River flows, and implementing strategies to control turbidity at pumps, among other things. (See bill summaries for more details.)

Potential Issues for Congress

Drought conditions in California and proposed state and federal solutions to address them under H.R. 3964 and S. 2198 raise several issues and questions that might be of interest to Congress. Many of these issues relate to the central question of how to increase water supplies for users while sustaining environmental and other conditions in a manner that satisfies existing or altered federal and state laws. A background discussion of selected key questions and the issues they generate is provided below.

How much water would be delivered to users under each bill?

The objective of both bills is to increase water deliveries and reliability for users; in particular water users south of the Delta. Neither bill contains assurances for delivering a certain amount of water, nor quantifies an amount of additional water to be generated by activities authorized in each respective bill. Based on this uncertainty, some might question how much more water might be delivered to users by each bill if enacted? S. 2198 contains broad language that would direct agencies to maximize water supplies and approves pilot projects for increasing water stored in water stressed areas. It is uncertain how much water could be delivered to users from specified projects authorized under S. 2198 and other projects that are not. Further, S. 2198 would provide federal agencies with broad discretion to conduct operations that would maximize water use while still adhering to state and federal laws and regulations. It is unclear how changes to this authority would affect how much water would be delivered to users since the amount would be based on federal actions yet to be documented.

H.R. 3964 would implement several measures that would redirect water from fish and wildlife uses, among others, to agricultural and municipal users. However, quantifying the amount of additional water for users if H.R. 3964 is enacted is difficult. For example, one of the bill's most significant changes would be to set the 1994 Bay Delta Accord as the operational guide for the CVP and the SWP, while also waiving federal ESA regulations and other laws pertaining to the operation of the CVP and SWP.[45] This would set maximum restrictions on water exports from the Delta depending on the time of year and guarantee a reliable supply of water for certain stakeholders, among other things. However, the exact amount of additional water made available in accordance with this change would depend on a number of factors. For instance, while H.R.

[45] The 1994 Bay-Delta Accord, proposed to be in effect for three years, would set varying maximum restrictions on water exports from the Delta depending on the time of year, guaranteed a reliable supply of water for the three main groups of stakeholders, ensured real time monitoring of water levels, and promised to comply with all environmental regulations through restoration efforts. It has subsequently lapsed and has been replaced with other efforts. See *Principles for Agreement on Bay-Delta Standards Between the State of California and the Federal Government,* Washington, DC, December 15, 1994, http://www.calwater.ca.gov/content/Documents/library/SFBayDeltaAgreement.pdf.

3964 appears to waive implementation of the ESA as it pertains to operations, the Accord included a section that authorized operational flexibility to comply with federal ESA regulations. It is unclear if the ESA provisions regarding operational flexibility would be applicable if H.R. 3964 were enacted. Under a separate provision, the Accord protected water users from losing water supplies to support future listings of species under ESA. According to the Accord, the protection of species that are listed after the Accord

> shall result in no additional water cost relative to the Bay-Delta protections embodied in the Plan and will, to the maximum extent possible, use the flexibility provided within Section 4(d) of the ESA. Additional water needs will be provided by the Federal government on a willing seller basis financed by Federal funds, not through additional regulatory re-allocations of water within the Bay-Delta.[46]

It is unclear if this provision in the Accord would reflect the listing of species after the bill would be enacted or would date back to when the Accord was written in 1994. In summary, the Accord provided water supply reliability as well as discretion to export water to users. H.R. 3964 would further these advantages by making operations not subject to ESA or any other law pertaining to the CVP and SWP.

H.R. 3964 also includes several other provisions that would be likely to increase water deliveries for users, but are difficult to quantify. For example, H.R. 3964 would provide replacement water for CVP contractors for water dedicated for fish and wildlife purposes, approves the development of a plan to increase CVP yield, and would authorize non-federal construction of water storage projects.

What would be the short- and long-term environmental effects of each bill?

Both bills support reallocating water supplies to users from environmental considerations. Under H.R. 3964, some laws and regulations that dedicate water supplies for environmental uses would be exempted, thus allowing federal agencies to supply more water to users. For example, the provision to operate the CVP and SWP under the Bay-Delta Accord, without regard to ESA, would benefit some water users, but environmental stakeholders may contend that the loss of ESA regulations will harm listed species in the region. Requirements for operational flexibility and planning for sustaining endangered and threatened fish species in the Delta would appear to be lowered as it relates to pumping by H.R. 3964. Operations under the bill are to strictly adhere to the prescripts in the Bay-Delta Accord; however laws pertaining to operations (including ESA) would be disregarded under H.R. 3964. On the other hand, some might contend that the existing Biological Opinions also do not allow enough operational flexibility for water supply purposes, and that restrictions to date have not had a meaningful impact on species (including those that were already declining). If pumping operations maximize water exports to users under the guidelines proposed by H.R. 3964, lower water supplies for fish and the ecosystem could have short and long term environmental consequences, although the extent of these consequences is currently unknown. Some may argue that the environmental damage from the change will be minimal, and would be tempered by the benefits of greater water deliveries to some agricultural and municipal users affected by the drought.

Under S. 2198, the Secretaries would be directed to maximize water supplies in project development and operations while the California governor's drought declaration is in effect. Some might question if the actions in this section and the broad direction to maximize water supplies for users might have unintended or long-term consequences for species in the Bay-Delta. For example, projects and actions might meet the minimum requirements under law for

[46] Section 2 under Institutional Agreements in the Bay-Delta Accord.

addressing species and water quality, but not account for long term effects. Indeed, some contend that if managers were required to maximize water supplies in implementing projects and actions under 103(b), their discretionary flexibility to make decisions would be narrower. Therefore, maximizing water supplies would appear to benefit water users under drought conditions; the long term effects on other factors such as species viability, recreation, and water quality would be unclear.[47]

What are other long-term ramifications of each bill?

Longer-term consequences of the proposed bills may be of interest to Congress. Provisions under H.R. 3964 would be in effect beyond the current drought, and would continue in perpetuity absent future changes to the statute.[48] As discussed above, this could have long-term environmental effects that change the scope of water planning in the Bay-Delta region. For example, some have argued that if ESA and state protections in the Bay-Delta are removed as proposed, there would be no incentive to implement the BDCP, a habitat conservation plan currently under development.[49] Further, the bill, if enacted, would set some precedents. For example, the waiver of ESA and state laws in order to provide increased water deliveries for federal contractors would be a significant departure from other approaches that defer to state laws and federal environmental statutes such as ESA. Some might use this provision as an example and justification for proposing exceptions to ESA guidelines on a species by species basis. H.R. 3964 would also elevate the supply and use of natural resources as a priority over species concerns, which could have ramifications beyond the water-use arena.

S. 2198 would largely be applicable during the current drought declaration (with few exceptions), thereby reducing its long-term effects. However, some might contend that its directive to maximize water use when contemplating actions taken under existing law would also elevate resource use at the expense of the environment. Even though environmental laws and regulations would have to be followed, it appears that S. 2198 would encourage federal agencies to meet the minimal requirements for the environment under applicable laws.

How would activities under each bill be funded?

Neither S. 2198 nor H.R. 3964 has specifically authorized new appropriations to fund activities authorized under the bill. S. 2198 would use existing authorities for funding under other laws to fund certain projects and activities, and in some cases provisions under S. 2198 would re-direct or re-prioritize activities under existing authorities to address drought-related activities. H.R. 3964 largely authorizes changes under existing laws for operations, activities, and procedures to generate water for users, and would redirect funding from some sources.[50] There is less emphasis

[47] S. 2198 addresses the long-term effects of some actions it prescribes. For example, some of the provisions under Section 103(b) contain directions to monitor the effects of actions on species and, in some cases, recommend changes to regulations.[47] Further, Section 103(b)(11) authorizes the Secretaries to implement offsite upstream projects to offset the effects of projects and operations on species listed under ESA.

[48] An exception to this statement is Section 114, which is a pilot program to protect native anadromous fish in the Stanislaus River. The authorities under this section expire seven years after enactment.

[49] See http://switchboard.nrdc.org/blogs/kpoole/hr_1837_and_the_death_of_the_b.html.

[50] For example, Title II of H.R. 3964 would authorize changes to P.L. 111-11 (the San Joaquin River Restoration Settlement Act) to increase water supplies for users. The law authorizes a variety of funds and appropriations to implement projects and activities that would be used under the amendments proposed by H.R. 3964. Title I also broadens the purposes for which CVP restoration fund monies can be used but at the same time limits revenues flowing into the fund.

placed on implementing projects and activities in H.R. 3964 compared to S. 2198. In some cases under H.R. 3964, funding is assigned to water districts, such as funding for the pilot program to protect native anadromous fish is directed to water districts.[51] Additionally, the bill would require certain studies that could eventually result in the construction of projects (and, potentially, federal funding requirements) in the future.

Are there potential precedent-setting provisions under these bills?

There are some potential precedent-setting provisions in both bills that might be of interest to Congress. Both bills elevate the need to supply additional water to users in comparison to other uses (e.g., environment and recreation). The directive to maximize water supplies for users under S. 2198 as a priority over other considerations (e.g., water quality or habitat conservation) might cause some to describe the provision as precedent-setting since it lowers the discretionary flexibility of agencies and prioritizes one resource need over others during a time of water shortage. Others might counter this notion by stating that other factors such as water quality and species needs are addressed in other laws and regulations that S. 2198 is not changing. Essentially, agencies would have to balance the new directives with parameters prescribed in existing law and regulations, yet do so with less flexibility.[52] The long-term effects of S. 2198 itself would be tempered since most of its provisions will sunset after the drought declaration in California is lifted. However, some might view the directive to maximize water supplies for users for actions specified within BiOps as precedent setting. Even if regulations in the BiOps are followed, any discretionary flexibility provided to agencies to manage water supplies would be narrowed because they would directed to maximize water supplies for users. These directives could eventually be significant during other water supply shortages, especially during times of drought.

H.R. 3964 contains several potential precedent-setting provisions. Similar in theme to S. 2198, H.R. 3964 would prioritize water supplies for users over other competing uses. The policy mechanisms used to achieve this objective differ from S. 2198. For example, the waiver of ESA and state laws in order to provide increased water deliveries for federal contractors would be a significant departure from previous approaches that defer to state laws and federal environmental statutes such as ESA, NEPA, and the Clean Water Act, and may attract attention despite Section 501 of the bill, which notes that nothing in the act shall serve as precedent for other states. Specifically, some might contend that provisions under H.R. 3964 that waive certain federal ESA provisions for the region could set a precedent for addressing ESA on a species by species basis, or region by region basis. Further, H.R. 3964 would prohibit "any" state or federal law (including the public trust doctrine) from reducing water supplies beyond those allowed in the Bay-Delta Accord and declaring a federal supremacy over water management to "protect existing water rights throughout the system." All of these changes are significant, and could hypothetically be a model for similar legislation in other areas.

[51] Section 114(d)(1).

[52] Flexibility is lowered because agencies are directed to maximize water supplies, which indirectly suggests that environmental or recreational needs are minimized to the extent allowable under existing laws and regulations.

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